

REMARKS/ARGUMENTS

Reconsideration of this application in light of the above amendments and following comments is courteously solicited.

The invention as claimed in claim 1 is directed to a resin gear comprising: a rim having teeth on an outer periphery thereof; a hub for receiving therein a driving shaft, one end portion of the hub having a key receiving portion for engaging a key of the driving shaft; a rib arranged between said rim and said hub; and a web having an outside web portion and an inside web portion, said outside web portion extending in radial directions to connect said rim to said rib, and said inside web portion extending in radial directions to connect said rib to said hub, wherein said key receiving portion has a side wall for preventing relative rotation of the key to the hub, and a bottom wall for allowing the key and the hub from being positioned in directions parallel to the driving shaft, and said inside web portion of said web is arranged so as to be shifted from the bottom wall of the key receiving portion toward a contact portion in which the key contacts the side wall of the key receiving portion, said inside web portion being arranged so as to be shifted from said outside web portion in one of said directions parallel to the driving shaft.

The invention as claimed in claim 4 is directed to a resin gear comprising: a rim having teeth on an outer periphery thereof; a hub for receiving therein a driving shaft, one end portion of the hub having a key receiving portion for engaging a key of the driving shaft; a rib arranged between said rim and said hub; and a web having an outside web portion and an inside web portion, said outside web portion extending in radial

directions to connect said rim to said rib, and said inside web portion extending in radial directions to connect said rib to said hub, wherein said key receiving portion has a side wall for preventing relative rotation of the key to the hub, and a contact portion, in which the key contacts the side wall of the key receiving portion, is arranged between a plane, which includes one surface of said inside web portion of said web, and a plane which includes the other surface of said inside web portion of said web, said inside web portion being arranged so as to be shifted from said outside web portion in one of said directions parallel to the driving shaft.

Thus, according to the present invention, since the contact portion of the key of the driving shaft with the side wall of the key receiving portion can be supported on the inside web portion, it is possible to reduce stress (bending stress and/or shearing stress) which is applied on the corner portions defined by the side wall and bottom wall of the key receiving portion, so that it is possible to improve the strength of the key receiving portion. As a result, it is possible to prevent the key receiving portion from being broken, and it is possible to surely transmit rotational power.

Claims 1-4 were rejected under 35 U.S.C. §102(b) as being anticipated by Watt (USP 4,902,162).

Watt illustrates in figure 8 a resin gear comprising: a rim having teeth on an outer periphery thereof; a hub for receiving therein a driving shaft, one end portion of the hub having a key receiving portion (12) for engaging a key (6) of the driving shaft; and a web extending in radial directions to connect said rim to said hub, wherein said key receiving portion has a side

wall for preventing relative rotation of the key to the hub, and a bottom wall for allowing the key and the hub from being positioned in directions parallel to the driving shaft, and a portion of said web surrounding the hub and key receiving portion is arranged so as to be shifted from the bottom wall of the key receiving portion toward a contact portion in which the key contacts the side wall of the key receiving portion.

However, Watt fails to disclose or suggest that a rib is arranged between the rim and the hub, and that the web has an outside web portion and an inside web portion, the outside web portion extending in radial directions to connect the rim to the rib, and the inside web portion extending in radial directions to connect the rib to the hub. Watt also fails to disclose or suggest that the inside web portion is arranged so as to be shifted from the outside web portion in one of the directions parallel to the driving shaft.

Accordingly, it is believed that the amended claims patentably distinguish the invention from the prior art.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

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If any fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

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